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# The Effects of Berry Extracts on Proliferation of Spleen Cells

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# THE EFFECTS OF BERRY EXTRACTS ON PROLIFERATION OF SPLEEN CELLS

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There is an increasing interest in alternative medicines and their effectiveness in treating disease. This research examined whether certain berry extracts could affect response of mouse spleen cells to antigenic stimulation, potentially helping to increase immune response to pathogenic organisms. We have also compared the effect of these extracts on immune cells isolated from “old” mice and “young” mice to determine whether the effects of age on immune response could be enhanced. We found that, depending upon the concentration of the extract added to spleen cell cultures *in vitro*, there was both increased immune response at the low levels of berry extract, and suppression at the higher levels of extract added. It was further noted that the “old” cells were stimulated to a greater percentage than cells isolated from “younger” mice. Further characterization of the active factors in the berry extracts are continuing, and the biochemical pathways involved in this augmentation process are being examined.